Mathematical Biosciences

an international journal

Volume 91

JON LOMAN (Lund, Sweden)
A Graphical Solution to a One-Predator, Two-Prey System with Apparent Competition and Mutualism 1

MAITHILI SHARAN AND ALEKSANDER S. POPEL (Baltimore, MD)
A Mathematical Model of Countercurrent Exchange of Oxygen Between Paired Arterioles and Venules 17

HENK VAN DEN BOOGAARD (Nijmegen, The Netherlands)
System Identification Based on Point Processes and Correlation Densities. II. The Refractory Neuron Model 35

REINHARD BÜRGER (Wien, Austria)
Mutation-Selection Balance and Continuum-of-Alleles Models 67

GUY S. NUSHOLTZ (Ann Arbor, MI)
Geometric Methods in Head Impact Response 85

BOOK REVIEWS

SURESH D. JAYAKAR
Theoretical Studies on Sex Ratio Evolution (S. Karlin and S. Lessard) 107

MATTHEW N. LEVY
When Time Breaks Down (Arthur T. Winfree) 109

J. HIERNAUX
Traité de Physiologie Théorique. Tome II: De la Cellule à l'Homme (G. Chauvet) 111

JOHN G. DAUGMAN
The Adaptive Brain (Stephen Grossberg) 113

ANNOUNCEMENTS 117

Elsevier

SETH MICHELSON AND JOHN T. LEITH (Providence, RI)
Unexpected Equilibria Resulting from Differing Growth Rates of Subpopulations within Heterogeneous Tumors 119
GÁBOR HORVÁTH (Puskin, Hungary)
Bionical Investigation of the Birch Leaf Roller's Incision 131
LUIZ A. PERESI (São Paulo, Brazil)
The Derivation Algebra of Gametic Algebra for Linked Loci 151
RICHARD D. MCARTHUR (Las Vegas, NV)
Parameter Estimation in a Two-Compartment Population Pharmacokinetic Model with Destructive Sampling 157
ROBERT LINDELL, JOSEPH J. DISTEFANO III, AND ELLIOT M. LANDAW (Los Angeles, CA)
Statistical Variability of Parameter Bounds for n-Pool Unidentifiable Mammillary and Catenary Compartmental Models 175
TUSHAR MADHU GORADIA AND KENNETH LANGE (Los Angeles, CA)
Applications of Coding Theory to the Design of Somatic Cell Hybrid Panels 201

BOOK REVIEWS
STEVEN H. STROGATZ
Concepts and Formalizations in the Control of Breathing (G. Benchetrit, P. Baconnier, and J. Demongeot, Eds.) 221
JOEL KEIZER
Linear Aggregation Theory in Cell Biology (Terrell L. Hill) 223
LEE A. SEGEL
Mathematics for Dynamic Modeling (Edward Beltrami) 225
ARTHUR SHERMAN
Mathematical Aspects of Hodgkin-Huxley Neural Theory (Jane Cronin) 227

ANNOUNCEMENT 231